# PUBLIC NOTICE

**PERMIT APPLICATION:** NRS # 06.007

**APPLICANT:** Pulte Homes Tennessee
Suite 175
7100 Commerce Way
Brentwood, Tenn. 37027
615-377-9260

**LOCATION:** Proposed Del Webb at Providence subdivision, Stoners Creek and Ben Franklin Lake, Rutland Road, Mount Juliet, Wilson County 36.1667 N, -86.4838 W

**WATERSHED DESCRIPTION:** The project site is located in the Stones River watershed (TN05130203) and is characterized by agriculture and increasing residential development. Stoners Creek is assessed as fully supporting classified uses and the unnamed tributary to Ben Franklin Lake is not assessed. The uses designated for these streams are fish and aquatic life, livestock watering and wildlife, recreation, and irrigation. Stoners Creek is a bedrock bottomed stream with a bottom width of 6 to 10 feet. The unnamed tributary is impounded to form Ben Franklin Lake.
(Photos of the site are included on the Internet version of this notice at http://www.state.tn.us/environment/wpc/wpcppo/arap)

**PROJECT DESCRIPTION:** The alterations to the watercourses and lake are to facilitate the development of a residential subdivision. In the upper east corner of the lake, the area will be dredged down three feet. The first road crossing is on the unnamed tributary, in the slackwater area leading into the lake. This road crossing will be a triple conspan and cover 48' linear feet of the stream. The existing stream bed will be excavated down three feet (1,234 cubic yards) and the immediate area will be widened out to the same depth (795 cubic yards). The second road crossing, on Stoner's Creek, is a 48'foot long conspan. Under the stream at the crossing will be a 10" water main. Immediately downstream will be an 8" sewer service line crossing.
The instream work will be performed when there is little or no flow in the streams.
In addition, the applicant proposes to build a pedestrian walkway and a boardwalk/pier on Ben Franklin Lake.
In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the division has determined that the proposed activity will not result in degradation to water quality.

**PERMIT COORDINATOR:** Juliana W. Kyzar

**USGS TOPOGRAPHIC QUADRANGLE:** Martha Quad 341 NE

**Photo 1**: Typical side area of Ben Franklin Lake. This is near the road crossing and proposed pedestrian walkway. Photo provided by applicant.

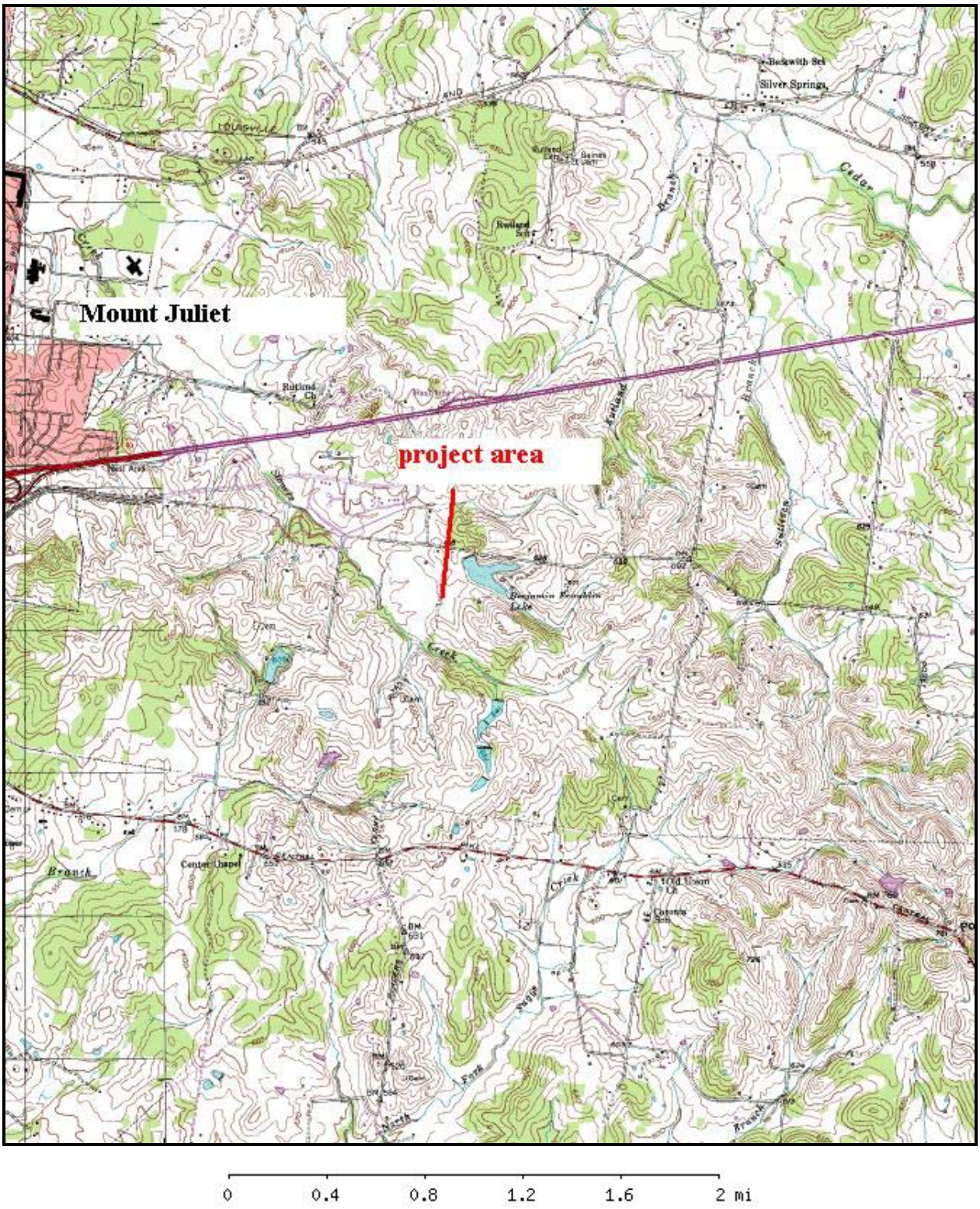



**Figure 1**: USGS topographic map with project area indicated

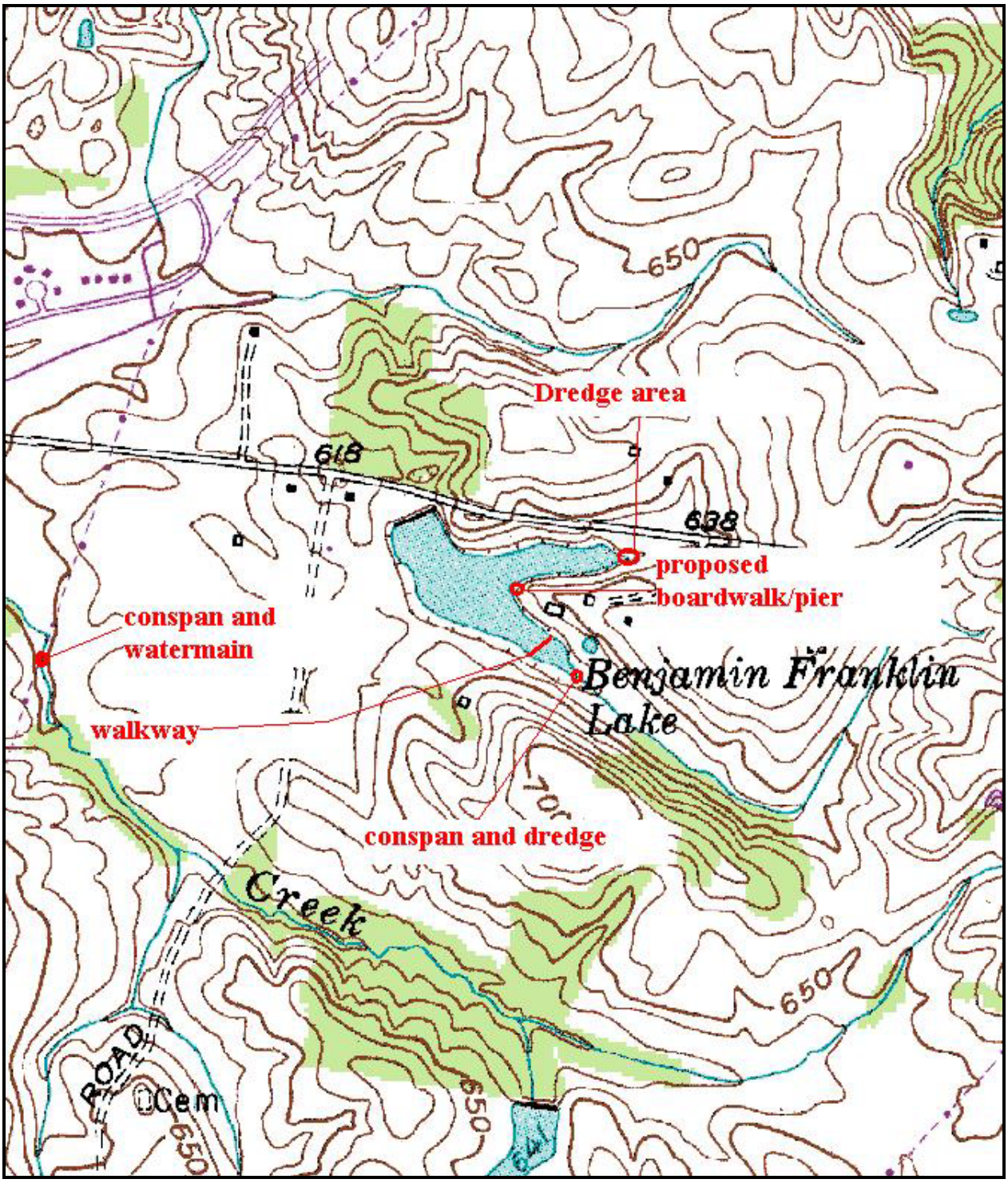



**Figure 2**: Topographic map with area of impacts indicated

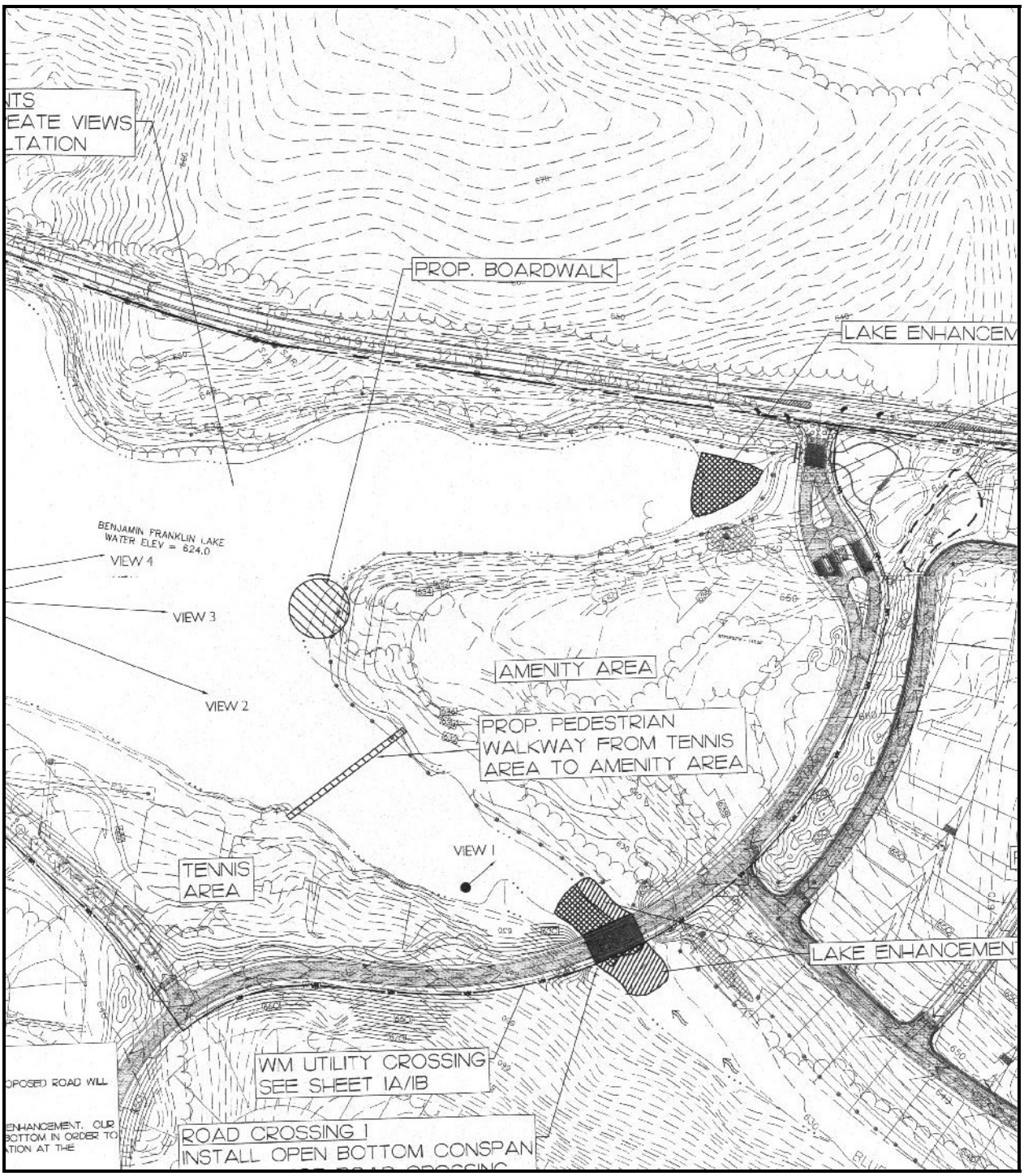



**Figure 3**: Basic site plan showing the alterations to Ben Franklin Lake and the unnamed tributary.

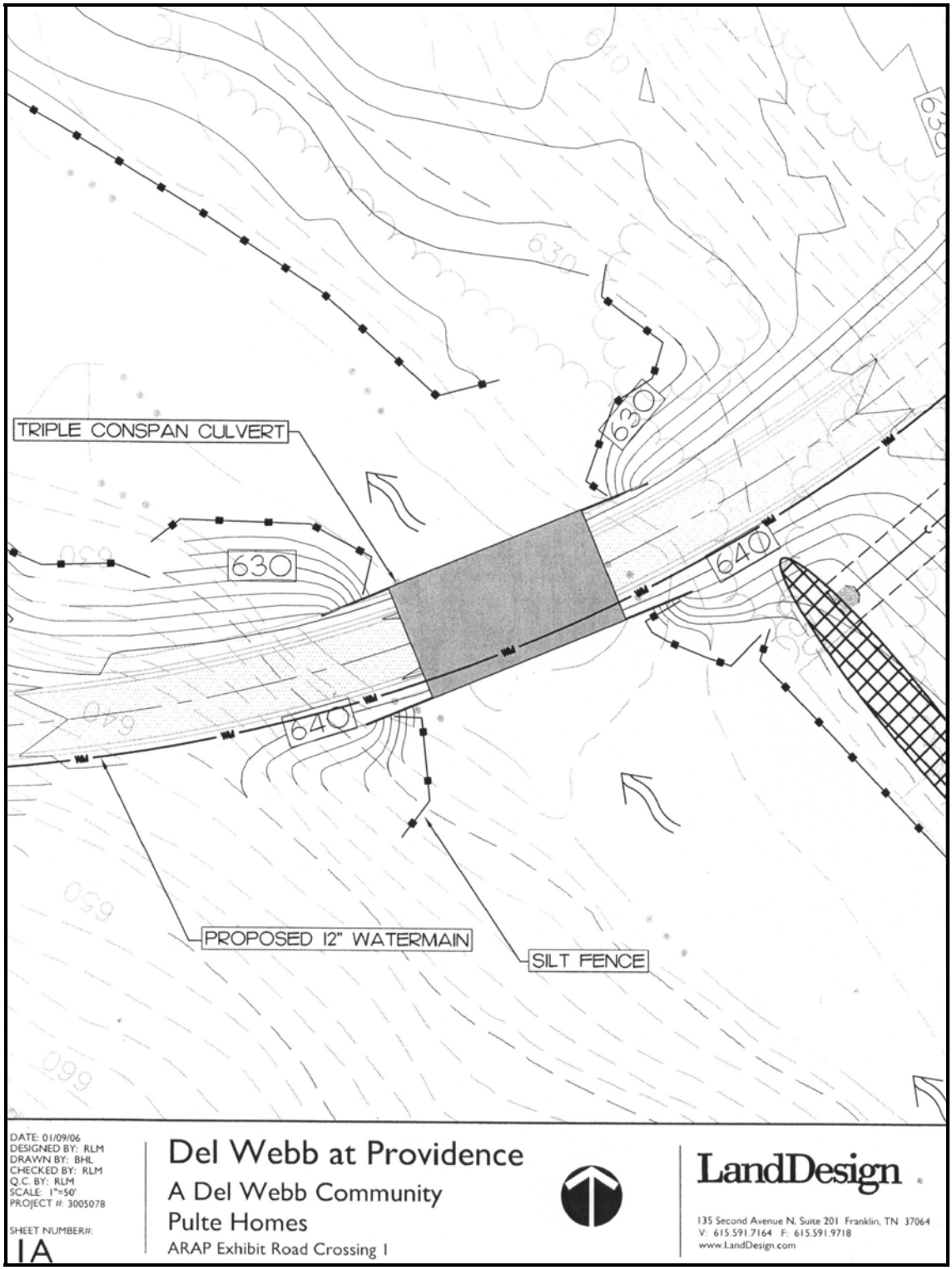



**Figure 4:** Road crossing on unnamed tributary to Ben Franklin Lake.

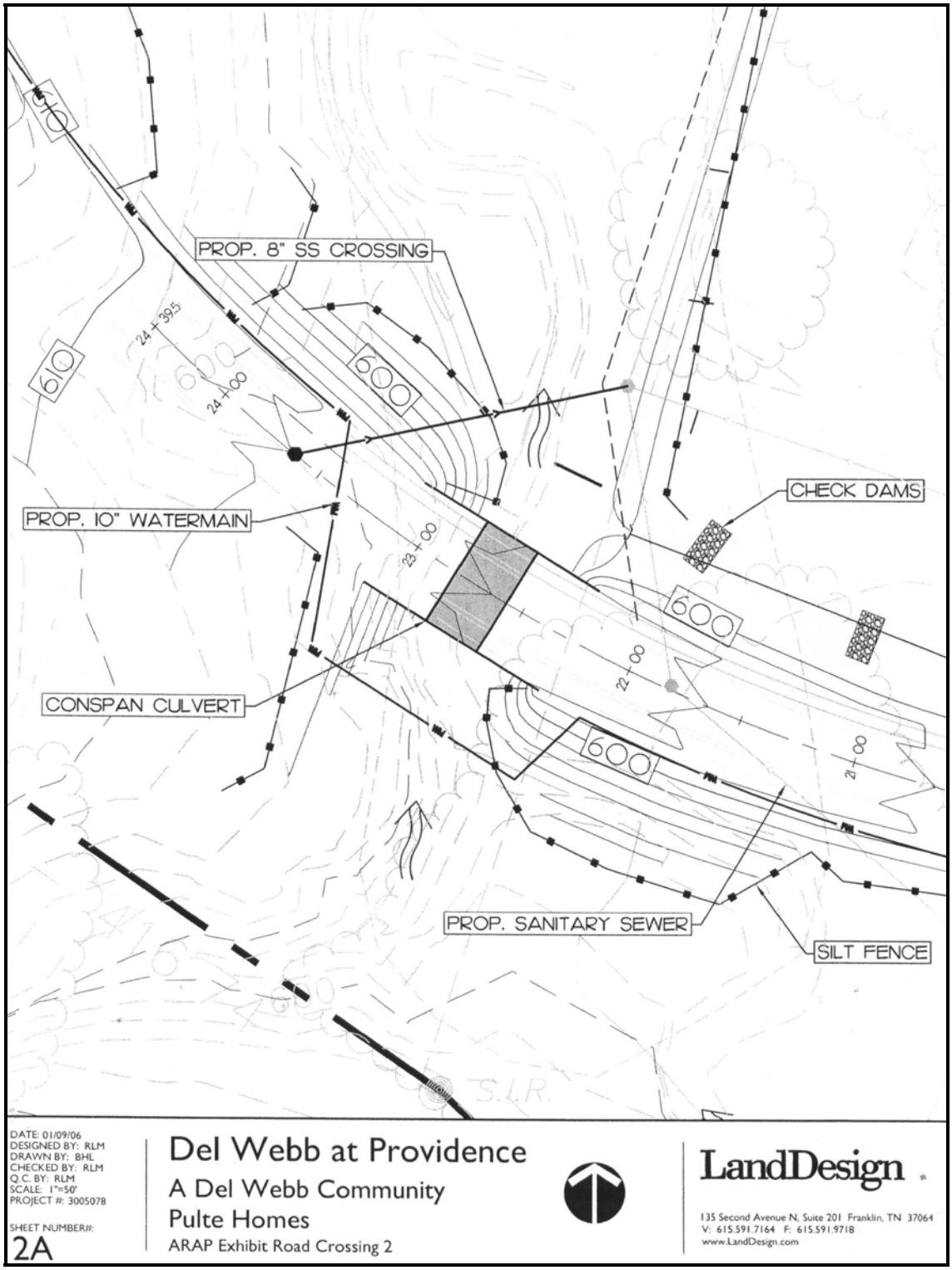



**Figure 5:** Road Crossing of Stoner's Creek and associated utility line crossings.

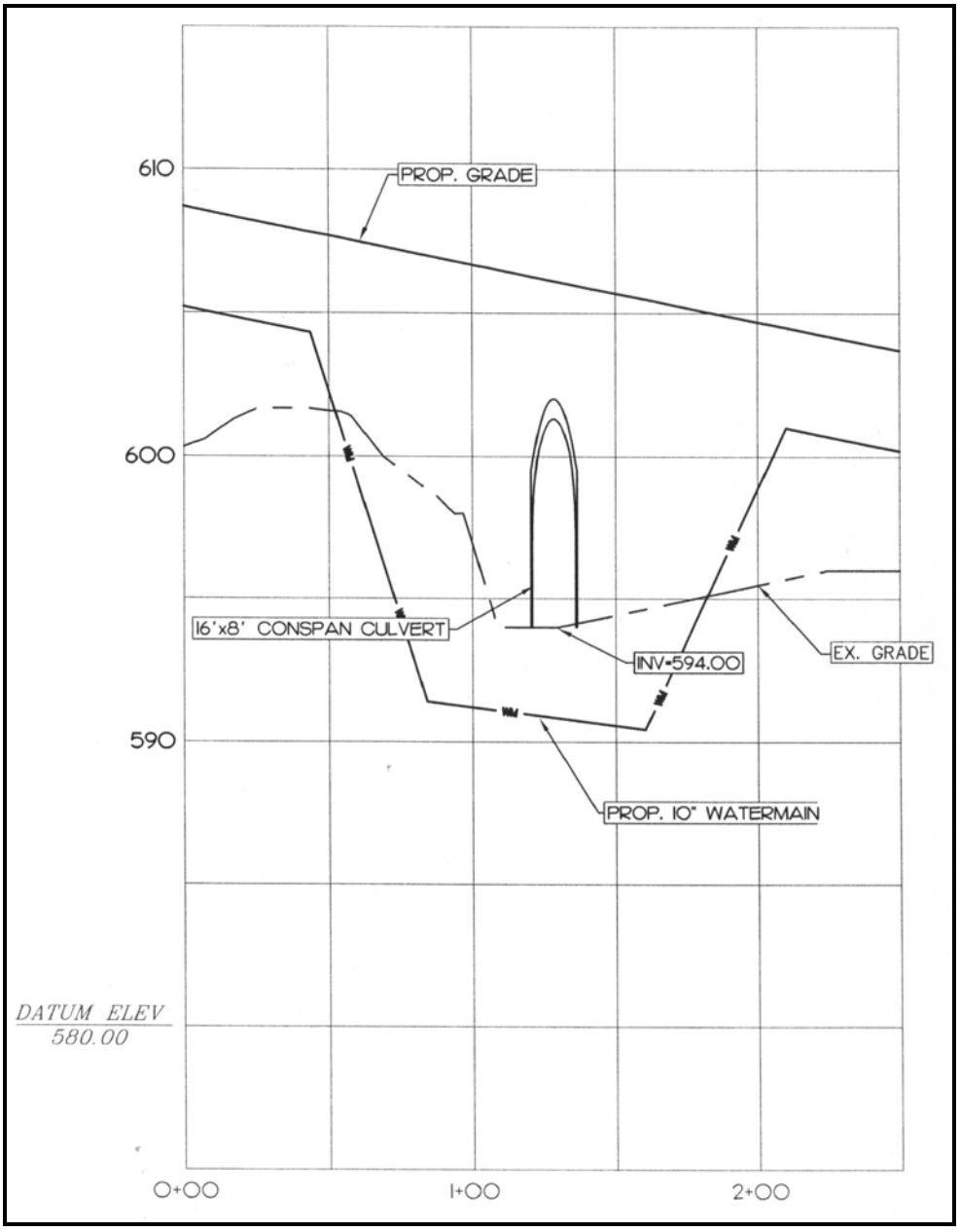
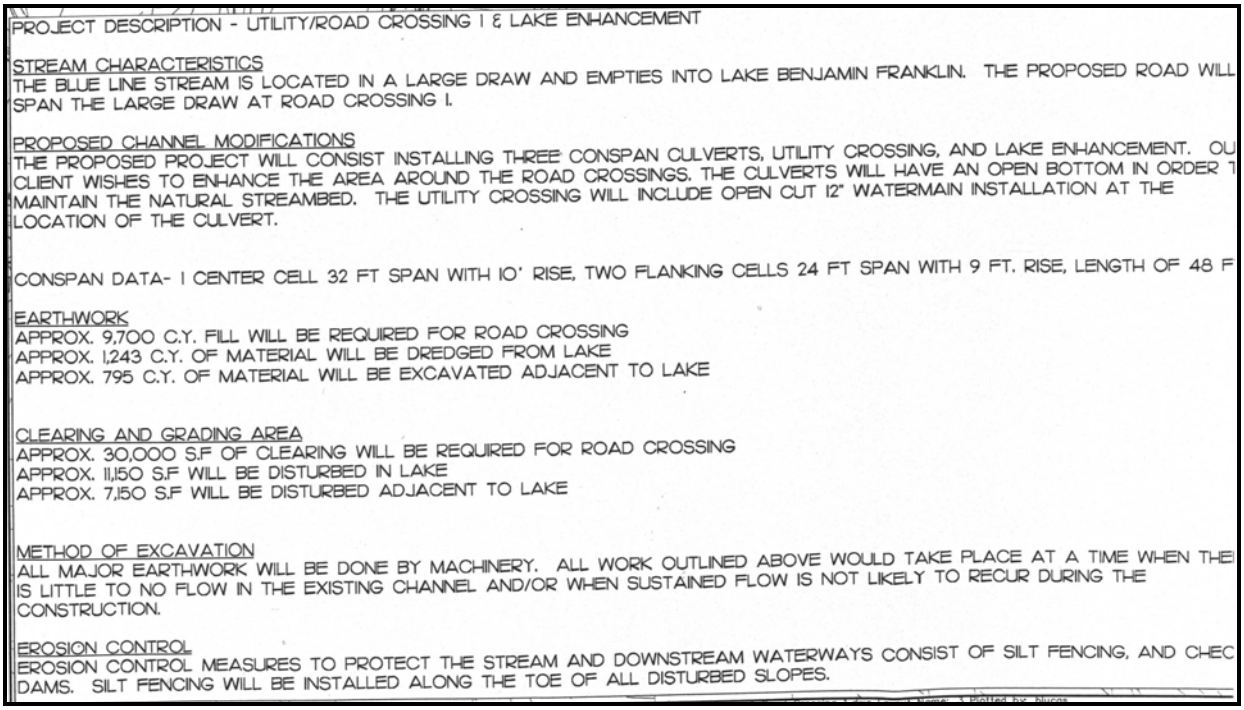



**Figure 6**: Road Crossing of Stoner's Creek and associated utility line crossings.



PROJECT DESCRIPTION - UTILITY/ROAD CROSSING 1 & LAKE ENHANCEMENT

STREAM CHARACTERISTICS
THE BLUE LINE STREAM IS LOCATED IN A LARGE DRAW AND EMPTIES INTO LAKE BENJAMIN FRANKLIN. THE PROPOSED ROAD WILL SPAN THE LARGE DRAW AT ROAD CROSSING 1.

PROPOSED CHANNEL MODIFICATIONS
THE PROPOSED PROJECT WILL CONSIST INSTALLING THREE CONSPAN CULVERTS, UTILITY CROSSING, AND LAKE ENHANCEMENT. OU CLIENT WISHES TO ENHANCE THE AREA AROUND THE ROAD CROSSINGS. THE CULVERTS WILL HAVE AN OPEN BOTTOM IN ORDER T MAINTAIN THE NATURAL STREAMBED. THE UTILITY CROSSING WILL INCLUDE OPEN CUT 12" WATERMAIN INSTALLATION AT THE LOCATION OF THE CULVERT.

CONSPAN DATA- 1 CENTER CELL 32 FT SPAN WITH 10' RISE, TWO FLANKING CELLS 24 FT SPAN WITH 9 FT. RISE, LENGTH OF 48 F

EARTHWORK
APPROX. 9,700 C.Y. FILL WILL BE REQUIRED FOR ROAD CROSSING
APPROX. 1,243 C.Y. OF MATERIAL WILL BE DREDGED FROM LAKE
APPROX. 795 C.Y. OF MATERIAL WILL BE EXCAVATED ADJACENT TO LAKE

CLEARING AND GRADING AREA
APPROX. 30,000 S.F OF CLEARING WILL BE REQUIRED FOR ROAD CROSSING
APPROX. 11,150 S.F WILL BE DISTURBED IN LAKE
APPROX. 7,150 S.F WILL BE DISTURBED ADJACENT TO LAKE

METHOD OF EXCAVATION
ALL MAJOR EARTHWORK WILL BE DONE BY MACHINERY. ALL WORK OUTLINED ABOVE WOULD TAKE PLACE AT A TIME WHEN THE IS LITTLE TO NO FLOW IN THE EXISTING CHANNEL AND/OR WHEN SUSTAINED FLOW IS NOT LIKELY TO RECUR DURING THE CONSTRUCTION.

EROSION CONTROL
EROSION CONTROL MEASURES TO PROTECT THE STREAM AND DOWNSTREAM WATERWAYS CONSIST OF SILT FENCING, AND CHEC DAMS. SILT FENCING WILL BE INSTALLED ALONG THE TOE OF ALL DISTURBED SLOPES.

PROJECT DESCRIPTION - UTILITY/ROAD CROSSING 2

STREAM CHARACTERISTICS
LENGTH AT CROSSING - 180 FT.
AVG. WIDTH - 40 FT.
AVG. DEPTH - 3 FT.
AVG. BOTTOM WIDTH - 7 FT.
VEGETATION - TREES, GRASS, AND ROCK BOTTOM

PROPOSED CHANNEL MODIFICATIONS
THE PROPOSED PROJECT WILL CONSIST INSTALLING ONE CONSPAN CULVERT AND UTILITY CROSSING. THE CULVERT WILL HAVE AN OPEN BOTTOM IN ORDER TO MAINTAIN THE NATURAL STREAMBED. THE UTILITY CROSSING WILL INCLUDE OPEN CUT 10" WATERMAIN INSTALLATION AT THE LOCATION OF THE CULVERT AND 8" SANITARY SEWER INSTALLATION NORTHWEST OF THE CULVERT CROSSING.

CONSPAN DATA- 1 CELL 16 FT SPAN WITH 8 FT RISE, LENGTH OF 48 FT. LENGTH

EARTHWORK
APPROX. 5,200 C.Y. FILL WILL BE REQUIRED FOR ROAD CROSSING

CLEARING AND GRADING AREA
APPROX. 27,300 S.F OF CLEARING WILL BE REQUIRED FOR ROAD CROSSING

METHOD OF EXCAVATION
ALL MAJOR EARTHWORK WILL BE DONE BY MACHINERY. IN ORDER TO MAINTAIN THE EXISTING CONDITIONS OF THE STREAM AS MUCH AS POSSIBLE, THE NATURAL STREAMBED WILL BE REMOVED PRIOR TO CONSTRUCTION AND REPLACED AT THE END OF CONSTRUCTION. ALL WORK OUTLINED ABOVE WOULD TAKE PLACE AT A TIME WHEN THERE IS LITTLE TO NO FLOW IN THE EXISTING CHANNEL AND/OR WHEN SUSTAINED FLOW IS NOT LIKELY TO RECUR DURING THE CONSTRUCTION.

EROSION CONTROL
EROSION CONTROL MEASURES TO PROTECT THE STREAM AND DOWNSTREAM WATERWAYS CONSIST OF SILT FENCING, AND CHECK DAMS. SILT FENCING WILL BE INSTALLED ALONG THE TOE OF ALL DISTURBED SLOPES.

**Figure 7**: Construction plan details for the road crossings and lake excavations.